

**FEBRUARY 28, 2002 2003**

~~FEBRUARY 28, 2001~~

**CONTRACT PERIOD THROUGH FEBRUARY 28, 2000**

TO: All Departments

FROM: Department of Materials Management

SUBJECT: Contract for **MULTIPLE TRAFFIC VIDEO MONITORING SYSTEM**

Attached to this letter is published an effective purchasing contract for products and/or services to be supplied to Maricopa County activities as awarded by the Board of Supervisors on **February 18, 1998**.

All purchases of products and/or services listed on the attached pages of this letter are to be obtained from the vendor holding the contract. Individuals are responsible to the vendor for purchases made outside of contracts. The contract period is indicated above.

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Wes Baysinger, Director  
Materials Management

CS/mm  
Attach

Copy to: Clerk of the Board  
**Jim Baker**, ~~Kevin Kottner~~, MCDOT  
Monica Mendoza, Materials Management

CALL FOR BIDS FOR: **MULTIPLE TRAFFIC VIDEO MONITORING SYSTEMS**

**I. INTRODUCTION:**

1.0 SCOPE OF WORK:

- 1.1 Maricopa County, in its function as Procurement Agency for the AZTech Public/Private Partnership, is soliciting bids from qualified Contractors/Vendors to Design, Furnish and Install Multiple Traffic Video Cameras in various Cities throughout Maricopa County.

The proposed services consist of providing Closed Circuit Television Cameras with Pan Tilt and Zoom capabilities for the Cities of Glendale, Mesa, and Tempe and the Town of Paradise Valley. The vendor is required to furnish and install the specified camera assemblies, lenses, pan and tilt units, mounting flanges, camera cable assemblies, pan and tilt cable assemblies, poles, parapet mounts, and a camera controller receiver unit at each of the remote camera sites. Additionally, the vendor will be required to furnish and install the specified transport media (Codec or Microwave) to connect the remote cameras to the Traffic Operations Centers at each of the respective municipalities. The operator workstation will be supplied by the County and its integration consultant and is not part of this proposal. The Contractor/Vendor will be required to work closely with the County and its System Integration Contractor (TRW) to ensure compatibility and functionality of the system.

The Contractor/Vendor shall use the SMART Corridor Instrumentation Work Package as a guide for the requirements of the Traffic Video Monitoring Systems. (Appendix B)

**II. TECHNICAL SPECIFICATIONS:**

1.0 GENERAL:

The purpose of this document is to functionally specify the hardware and tasks to be implemented for the Traffic Video Monitoring component of the AZTech SMART Corridor Instrumentation work package. The Traffic Video Monitoring component is a series of closed circuit television systems consisting of field equipment, Traffic Operations Center equipment, and other necessary hardware and software needed to assemble a fully functional, integrated traffic monitoring system. These systems will be installed in Traffic Operations Centers in the Cities of Glendale, Mesa, and Tempe and the Town of Paradise Valley. The purpose of this Request for Proposal (RFP) is to solicit a Contractor/Vendor to design, furnish, install and make fully operational, four (4) closed circuit television camera sites in the municipalities named above. The Video switch and the control console are being supplied by the County. The Contractor/Vendor will be required to work closely with the County and their Systems Integration contractor (TRW) to ensure that a fully functional and compatible video monitoring system is delivered. All work shall be completed and operational ten (10) weeks after notice to proceed is issued.

Primary Terms and Definitions

CITY/TOWN --	The Cities of Glendale, Mesa, and Tempe and the Town of Paradise Valley's Traffic Engineering Divisions.
CONTRACTOR --	The successful bidder who will design, furnish and install the video components of the Smart Corridor work package.
ENGINEER --	The City or County Traffic Engineer or the agent assigned to represent the authority of the city Traffic Engineer.
TOC --	The Traffic Engineering Division's Traffic Operations Center.
DVT --	Demonstration Video Tape
RFP --	Request for Proposal

**II. TECHNICAL SPECIFICATIONS:** (continued)

2.0 PROPOSAL REQUIREMENTS:

The as-built drawings and functional specifications may be obtained by the prospective bidders. The hardware and software portions of the specifications are intended to allow potential contractors to use their existing proven systems to the extent possible. This RFP requires contractors to provide a detailed design proposal, which meets or exceeds the functional specifications contained herein. Such proposals shall include a detailed breakdown of hardware components. Where the proposer's hardware architecture or software functionality differs from that outlined by the functional specification, the proposer must explain the particular advantages and disadvantages of the proposed scheme relative to the functional specification. Each proposer shall submit a full copy of this functional specification document with legible notations marking sections, paragraphs, and sentences which cannot, may not, or will not be met by the proposal or will be met using an alternative plan. Supplemental descriptions may be attached for space and clarity reasons as long as reference markings to such attached descriptions are adequately coordinated. By leaving sections, paragraphs, and sentences free of notations, the proposer is acknowledging that his proposal includes all of the implementation of the system as defined by the specification. Each proposal shall be reviewed for acceptability and completeness.

3.0 GENERAL DESCRIPTION OF TRAFFIC VIDEO MONITORING COMPONENT

3.1 Primary Project Areas

The Traffic Video Monitoring Component is comprised of four primary project areas for which the contractor SHALL BE RESPONSIBLE:

- 1) Furnish and install Field Equipment as described in section 5.0.
- 2) System Integration as described in section 6.0.
- 3) Traffic Video performance test as described in section 7.0.
- 4) Traffic Video documentation and training as described in section 8.0.

In light of the four primary project areas, the Contractor shall design the Traffic Video systems to be compatible with current and future designs of the State, County and Cities Traffic Management Video Systems.

4.0 GENERAL REQUIREMENTS:

The Video Vendor/Contractor shall furnish and install closed circuit television cameras consisting of field equipment, and other ancillary and incidental equipment required to assemble a fully functional, integrated traffic monitoring system. This system shall be provided by a CONTRACTOR with experience in the traffic related CCTV industry. All furnished components shall provide a mean time between failure (MTBF) of 20,000 hours minimum unless specified to be a higher minimum elsewhere. Compliance with ISO quality assurance standards is required. The CONTRACTOR shall design, furnish, and install Traffic Video Cameras and the specified transport media to transmit the video signal for the camera site back to the video switch at the respective municipal Traffic Operations Centers.

The County will furnish and install an Operator Workstation and a Javelin JO2005 series matrix video switch at each Municipal Traffic Operations Center. The Operator Workstation will be equipped with camera control software furnished by TRW.

5.0 FIELD EQUIPMENT SPECIFICATIONS:

The Remote Video Cameras and ancillary equipment shall be installed at six (6) locations. These locations are described in Appendix A (SMART Corridor Work Package).

**II. TECHNICAL SPECIFICATIONS:** (continued)

5.0 FIELD EQUIPMENT SPECIFICATIONS: (continued)

5.1 General Field Work and Material

The CONTRACTOR shall furnish and install all electrical conduit, junction boxes, cables, wire, mounting hardware, connectors, and all necessary equipment needed to complete the installation of all the field camera sites.

5.2 Color Cameras

The CONTRACTOR shall furnish and install six COHU 3500 series color cameras. Cameras shall utilize 1/4" sensors. Cameras shall be capable of integration and shuttering for optimum exposure control. Cameras shall include an 8:1 digital zoom as a minimum. Contractor shall provide pricing for an optional video integration system per camera. This shall be an itemized addition to the base camera pricing.

5.3 Lenses

The CONTRACTOR shall furnish and install the lenses.  
The lens shall be of the highest quality and matched to the camera.  
The lenses shall have the following components and features:

- 1) Motorized zoom
  - 2) Automatic iris with manual override capability.
  - 3) 10-100mm (1/4" format).\*
  - 4) Glass lens elements
  - 5) Preset 1/preset2/preset3/...
- \* Tempe locations shall use a 16-160mm (1/4" format) lens or approved equal.

5.4 Environmental Camera Housing

The CONTRACTOR shall furnish and install environmental camera housings. The camera housings shall have the following components and features in order to protect the camera from rain, pollution, dirt, dust and humidity:

- 1) Sealed and pressurized enclosures (non-building mounted sites).
- 2) A low pressure sensor. If the pressure reaches a predetermined low level, a message will be superimposed on the video camera output (non-building mounted sites).
- 3) No exposed cabling on building mounted camera sites.
- 4) Contractor shall make every effort to match any parapet camera mounting hardware to the architectural style of the building to which it will be mounted (Mesa and Glendale locations only).
- 5) Cameras shall be installed in the enclosures at the factory and adjusted appropriately.
- 6) Environmental Camera Housing shall be Legacy series or approved equal.
- 7) Environmental Camera Housings shall be equipped with Heaters.

5.5 Sunshield

The CONTRACTOR shall furnish and install sunshields. A Sunshield shall be furnished and installed on each non-building mounted camera housing to protect the camera and housing from direct sunlight. The Sunshield shall be designed, manufactured and installed as follows:

- 1) To allow air to pass over the external surface of the camera housing while keeping direct sunlight off of the housing.
- 2) The front portion of the shield will protrude approximately 4" over the housing viewing window.
- 3) Environmental Camera Housing shall be equipped with Sun Shields

**II. TECHNICAL SPECIFICATIONS:** (continued)

5.0 FIELD EQUIPMENT SPECIFICATIONS: (continued)

5.6 Pan/Tilt Unit

The CONTRACTOR shall furnish and install pan/tilt units. Each camera, lens, and camera environmental housing shall be mounted on the pan/tilt unit, which is placed on top of the support structure. Each pan/tilt unit shall have the following components and features:

- 1) Remote positioning of the camera from the Traffic Operations Center.
- 2) Remote Response to preset positioning commands from the TOC.
- 3) A pan/tilt drive mechanism that is weatherproof and dustproof.
- 4) A minimum horizontal range of 0 degrees to 350 degrees.
- 5) Stops to prevent wrapping the cables around the pole.
- 6) A minimum range of vertical movement of + or - 90 degrees.
- 7) A pan speed of 9 degrees per second + or - 1 degree.
- 8) A tilt speed of 3 degrees per second + or - 1 degree.

5.7 Camera Assembly Support Structure

The Camera Assembly Support Structure (support structure) shall be furnished and installed by the CONTRACTOR. The CONTRACTOR shall furnish and install the support structure, foundation (where specified), conduit, wire/cables, junction boxes and all necessary equipment needed for a complete working traffic Video Camera. The COUNTY, upon request, will supply an as-built drawing for each of the support structure locations.

5.8 Lighting Protection

The CONTRACTOR shall furnish and install a properly functioning lightning rod and transient surge suppresser assembly to protect the field CCTV equipment from lightning strikes and supply voltage surges.

5.9 Camera Control Cabinet

The CONTRACTOR shall furnish and install a complete ground or pole mounted environmental enclosure near each camera site. This enclosure shall provide the environment necessary to protect the electrical components within.

5.10 Camera Control Receiver

The CONTRACTOR shall furnish and install all necessary camera control receivers (CCR) to facilitate each camera site. Sites with two cameras shall be selectable by an A/B switch. This CCR shall provide remote and local control of the following functions:

- 1) Zoom in/zoom out.
- 2) Pan up/pan down.
- 3) Pan right/pan left.
- 4) Focus near/focus far.
- 5) Iris open/iris closed.
- 6) Preset 1/Preset 2/Preset 3/...
- 7) Video out.
- 8) Auxiliary on/off.
- 9) Camera power on/camera power off.

**II. TECHNICAL SPECIFICATIONS:** (continued)**5.0 FIELD EQUIPMENT SPECIFICATIONS:** (continued)**5.11 Transmission of Video Images**

The CONTRACTOR shall furnish and install Southwest Microwave 902 BMS / 802 BMS series Video links and all ancillary equipment necessary to install and transmit a video image of a quality level equivalent to or better than near full motion video. The microwave equipment shall be Matched to the Camera manufacturers interface requirements. (COHU Cameras will require a Duplex RS-422 Control Signal)

An acceptable alternative of near full motion video may be achieved using a telephone T-1 circuit with Enerdyne encoder/decoder units (ENC2000R2/DEC2000R2). The T-1 provider (USWEST) will supply CSU/DSU equipment. The County will coordinate the installation of T-1 circuits as required.

Tempe Video sites have an existing microwave link between Bell Butte and A Mountain, the City of Tempe will provide and install a microwave link between A Mountain and The Tempe Traffic Operations Center. The contractor shall verify compatibility between video and microwave systems. If the systems are not compatible, the contractor shall provide the necessary microwave equipment to facilitate the video links.

Where a microwave site license is unavailable, encoder/decoder equipment shall be used in place of microwave equipment.

**5.12 Demonstration Video Tape (VDT)**

The CONTRACTOR shall provide a high quality, 1/2 inch VHS format, Demonstration Video Tape (DVT) of approximately 10 minutes in length clearly showing the quality of the video image that will be seen at the completion of the project at a representative TOC. This DVT shall include 5 minutes of daytime viewing showing various scenes using the zoom/pan/tilt features. This tape shall be used again for comparison purposes during the performance tests. The CONTRACTOR during the initial RFP process shall supply this VDT to the ENGINEER.

**6.0 SYSTEM INTEGRATION SPECIFICATIONS**

The CONTRACTOR shall be required to work closely with TRW to integrate the Field Equipment and TOC Equipment into a seamless, fully functional, Traffic Video System. The final product shall be a complete, working system, ready for operation.

**7.0 TRAFFIC VIDEO CAMERA PERFORMANCE TESTS**

Upon the completion of the installation, the CONTRACTOR shall conduct a system performance test in the presence of the ENGINEER to demonstrate the operation of Traffic Video Monitoring Cameras and to verify compliance with the specified requirements and provisions of this contract. The CONTRACTOR shall provide all test equipment required for the performance of the system test.

The Traffic Video Camera performance test shall be conducted after the following conditions are met:

- ⇒ Installation of all Traffic Video Camera equipment has been completed as specified.
- ⇒ All field equipment has been checked by the COUNTY and found to be in compliance with the specified requirements.
- ⇒ All TOC equipment has been checked by the COUNTY and found to be in compliance with the specified requirements.
- ⇒ Video images from the CCTV cameras are being received at the TOC.
- ⇒ The remote control system is operating as specified.

**II. TECHNICAL SPECIFICATIONS:** (continued)**7.0 TRAFFIC VIDEO CAMERA PERFORMANCE TESTS** (continued)**7.1 Camera Location Test**

The camera location test shall be performed at all the field locations. The camera location test shall include but not be limited to the following:

- ⇒ Local operation of all remote control functions (Pan/tilt, lens, power) while observing the video picture on a portable monitor. This test shall be conducted to observe position operation, including presets, limit switch settings, zoom lens operation, and tracking.
- ⇒ Measurement and recording of video signal levels with an oscilloscope.
- ⇒ Measurement and recording of noise in the video signal.
- ⇒ Test installed camera to verify camera enclosure pressurization.
- ⇒ Verification of installation of specified cables and connectors.

**7.2 TOC Location Test**

The TOC test shall include but not be limited to the following:

- ⇒ Measurement and recording of baseband video signal levels.
- ⇒ Inspection of cables and connectors.
- ⇒ Operation of all remote control functions from the AZTech Work Station to verify proper operation of the camera.
- ⇒ Display of camera images on the video monitor.
- ⇒ Display of videotape images on the video monitor.
- ⇒ Display of cable TV images (where available) on the video monitor.
- ⇒ Making a video recording on the DVT of the video signals from the cameras while performing remote control functions. The DVT shall be delivered to the ENGINEER immediately following the completion of the test.
- ⇒ Simulation of a Camera enclosure low pressure problem and TOC text display at operator workstation.

**7.3 Nighttime Test**

In addition to the tests performed above, the CONTRACTOR shall perform a second performance test of the Traffic Video Camera during the hours of darkness to verify proper operation of the auto iris lens, and the absence of video signal noise. This test shall be conducted at the TOC in the presence of the ENGINEER and shall include but not be limited to the following:

- ⇒ Display the camera image and operate all remote functions while observing both the brightness and darkness of scenes available from the camera locations.
- ⇒ Make a video recording on the DVT of the camera operations performed under the above item. The recorded videotape shall be returned to the ENGINEER immediately following the completion of the nighttime test.

**7.4 DVT Examination**

The ENGINEER and COUNTY staff will review the DVT to determine if the comparison between the CONTRACTOR'S promised video image and the actual Traffic Video Camera image is acceptable. If the ENGINEER accepts the Traffic view video image, the CONTRACTOR shall proceed to the Extended Traffic View Test. If the ENGINEER does not accept the Traffic View video image as being reasonably close to the video image previously promised by the CONTRACTOR, adjustments shall be made by the CONTRACTOR. After the adjustments are made, the entire performance test shall be repeated.

**II. TECHNICAL SPECIFICATIONS:** (continued)

7.0 TRAFFIC VIDEO CAMERA PERFORMANCE TESTS: (continued)

7.5 Extended Traffic Camera Video Test

Upon the successful completion of the Traffic Video Camera performance test, an extended Traffic Video Camera test shall be conducted as follows:

The Traffic Video Camera shall be activated and left on continuously for 30 calendar days. During this period, all material and components of the Traffic Video Camera which are installed in this contract shall operate as specified. It shall be the responsibility of the CONTRACTOR to ensure that the Traffic Video Cameras and their components operate as specified. During the extended Traffic Video Camera test, the CONTRACTOR shall repair or replace, at no additional cost to the COUNTY, any component (supplied by the Contractor) that malfunctions or operates below the level specified.

If a major component of a Traffic Video Camera fails, the entire Extended Traffic Video Camera Test shall restart, after the CONTRACTOR corrects the problem.

At the end of the extended test period, the ENGINEER shall verify that all the components of Traffic Video Cameras and Communication Transport are operating in accordance with the specifications. Verification of compliance by the ENGINEER shall constitute successful completion of the extended system test.

**The Contractor shall only be responsible for the components of the system that he provides and installs under this proposal.**

8.0 TRAFFIC VIDEO CAMERA DOCUMENTATION & TRAINING

The CONTRACTOR shall prepare and furnish to the COUNTY six copies of comprehensive maintenance manuals for equipment installed for this project. The manuals shall be supplied in durable, loose-leaf, three ring binders of appropriate size. All volumes shall be titled and have pages numbered and indexed to allow easy and efficient removal and replacement.

The manuals shall be subject to approval of the COUNTY and shall be provided in the following formats.

8.1 Maintenance Manual

The maintenance manual shall be prepared in two volumes for persons having responsibility for preventive maintenance, troubleshooting and repair of system components, and shall include as a minimum the following:

Volume I

- \* A detailed description of the Traffic Video Camera system, including camera assembly, video transmission equipment, and control equipment.
- \* A complete description of the Traffic Video Camera operation.
- \* Individual device operation (Camera, lens, control receiver, etc.).
- \* Trouble shooting procedures at system and device levels.
- \* Preventive maintenance and system adjustment procedures.
- \* "As built" drawings and diagrams as follows:
  - A video system block diagram showing all components.
  - Video signal path diagram.
  - Control signal path diagram.
  - System connection diagram.
  - Detailed connection diagrams.
- \* A listing of all measured signal levels recorded during the system performance test.



**II. TECHNICAL SPECIFICATIONS:** (continued)8.1 Maintenance Manual (continued)Volume I (continued)

- \* An equipment source reference listing for all Traffic Video devices including:
  - Device manufacturer.
  - Address.
  - Customer Service telephone number.
  - Nearest Authorized Service Center.
  - Address.
  - Telephone number.

Volume II

- \* Manufacturer's operation and installation guides for all Traffic Video devices
- \* Manufacturer's service and repair guides for all Traffic Video devices

8.2 Training

The CONTRACTOR shall provide two training sessions within Maricopa County.

The first training session shall be for maintenance and trouble shooting of the Traffic Video Camera equipment. This session shall be a minimum of (4) hours in length. This session is primarily intended for the City maintenance staffs.

The second training session shall be for the operation of Traffic Video Cameras. This session shall be a minimum of (4) hours in length. This session is primarily intended for the TOC operations staff.

8.3 Warranty

The contractor shall warrant all Material and Labor furnished as part of this proposal for 12 months after final acceptance. Final acceptance is based on the testing and acceptance criteria outlined in section seven.

**III. ADMINISTRATIVE SPECIFICATIONS:**1.0 PRE-PROPOSAL CONFERENCE:

- 1.1 There will be a pre-proposal conference on November 21, 1997 at 9 00 AM at the Maricopa County Department of Transportation (MCDOT), located at 2901 W. Durango St., Phoenix, AZ, 85009. This is not mandatory.
- 1.2 The purpose of the pre-proposal conference is to provide an opportunity for proposers to ask questions and receive clarification to the proposal document.

2.0 POST AWARD CONFERENCE

- 2.1 Prior to commencement of work, the department shall arrange a post award conference with the Procurement Officer, Contract Administrator, using agency representatives, and the successful contractor to discuss the operational plans and the execution of the contract.
- 2.2 No work shall begin until the County has approved the plan in writing. A written notice of approval or disapproval shall be provided within five (5) workdays.

### III. ADMINISTRATIVE SPECIFICATIONS:

#### 3.0 COMPLETION DATE-LIQUIDATED DAMAGES:

- 3.1 Successful proposer shall have all work completed and operational ten (10) weeks after notice to commence is issued.
- 3.2 Time is of the essence in completion of the work included in this specification. It is expected that the successful vendor will commence work immediately upon issuance of notice to begin and proceed with all due diligence to schedule, order and perform the work in such order and manner as to be ready and fully operational ten (10) weeks after commencement of work. For each and every consecutive calendar day in excess of that time, or later date adjusted from a written extension of time by the County that the contract terms remain unfilled, the vendor shall pay to the County the sum of \$250.00/day in liquidated damages. That sum is considered a reasonable and proper measure for damages which the County will sustain per day by reason of failure of the vendor to fulfill the terms and conditions of the contract. This is not to be construed in any way to be a penalty to the vendor.

#### 4.0 AWARD OF CONTRACT:

- 4.1 The award shall be made to the responsible proposer whose proposal is determined in writing to be the most advantageous to Maricopa County taking into consideration the evaluation factors set forth in the RFP.

#### 5.0 EVALUATION CRITERIA:

- 5.1 All responses to this Request for Proposals become the property of Maricopa County and will be held confidential until formal award by the Board of Supervisors. Any information deemed proprietary by the proposer will be held confidential to the extent permitted by law. The County reserves the sole right to judge the information presented by the proposers during the evaluation and selection process. Evaluation criteria is listed in order of relative importance (i.e., the first criteria listed garners the most points, followed by the second, etc.):

##### A. Completeness of the Proposal:

1. Conformance to the requirements of the RFP.
2. References including experience in CCTV installations in the transportation industry or installation of outdoor institutional camera and microwave radio equipment.
3. Demonstrated reliability.
4. Installation and implementation.

##### B. Price:

1. Base price.
2. Price per additional units
3. Unit price for itemized components.
4. Post warranty maintenance costs.

##### C. Management Qualifications:

1. Qualification of assigned personnel.
2. Vendor background and organization.

#### 6.0 INSTRUCTION FOR PREPARING AND SUBMITTING PROPOSALS:

- 6.1 Proposers are to provide an original and four (4) copies of this proposal. Proposers to address proposals to the Director of Materials Management, Maricopa County Department of Materials Management, Serial-RFP, 320 W. Lincoln Street, Phoenix, AZ 85003. Proposals shall be signed by a corporate official who has been authorized to make such commitments.

**III. ADMINISTRATIVE SPECIFICATIONS:** (continued)**6.0 INSTRUCTION FOR PREPARING AND SUBMITTING PROPOSALS:** (continued)

6.2 Proposals must adhere to the following outline. Additional information may be submitted as attachments to clarify or expand on proposer's technical proposal:

1. Table of Contents
2. Registration Sheet
3. Short introduction and summary
4. Proposal - Proposal shall contain a statement of all the programs and services proposed including conclusions and generalized recommendations. Proposal should be all inclusive detailing your best offer. Additional related services should be incorporated into the proposal if applicable
5. Other data
6. Pricing

**7.0 CONTRACT PERIOD:**

7.1 This Request for Proposals is for awarding a contract to cover a two (2) year period with an option to renew for three (3) one(1) year periods under the same terms and conditions.

**8.0 REFERENCES:**

Vendors to submit at least four (4) references for which a substantial work similar to that specified in the RFP has been performed. Please fill in the Completed and On-going Projects sheet.

**9.0 LIST OF SUBCONTRACTORS:**

For use by Owner to determine competency and compatibility of those who will work on this project, each Proposer is required to submit, with his proposal, a list naming the Subcontractors who will be used in performing the Work.

It shall be the General Contractor's responsibility to verify that all Subcontractors listed are licensed with the State of Arizona, as applicable, to meet the Project requirements. This list shall be filled out and enclosed in a separate, opaque, sealed envelope marked "LIST OF SUB-CONTRACTORS", and showing the Proposer's name thereon; this envelope shall then be inserted in the General Proposal envelope with the other forms. This list, submitted by the successful Proposer, will be retained by the Owner, and the lists submitted by other proposers will be returned unopened. Sub-contractors not named in such list may not be employed on the project without written permission of the Owner. If a change occurs in the list, brought about by the exercising of ANY of the alternates involved in the Form of Proposal, the proposer must show this change on the list. If no names appears, other than those listed under the Base Proposal, adherence to those names will be assumed, no matter which alternate, if any, is exercised. By this requirement, the Owner does not establish any contractual relation between the Owner and any Sub-contractor, the sole purpose and function of such requirement being set forth in the first sentence of this paragraph.

**IV. SUPPORTIVE SPECIFICATIONS:****1.0 TERMINATION:**

Either party may terminate this contract at any time, with 30 days notice in writing to the other party. Such notice shall be given by personal delivery or by Registered or Certified mail.

**IV. SUPPORTIVE SPECIFICATIONS:** (continued)**2.0 NON-PERFORMANCE:**

Nonperformance of the bidder in terms of specification shall be a basis for termination of the contract by the County. Cancellation by the County may be made upon 15 days written notice to the successful bidder. The County shall not pay for any material which is unsatisfactory. The bidder may be given a reasonable opportunity before termination to correct the deficiencies. This, however, shall in no way be construed as negating the basis for termination for nonperformance.

**3.0 APPROPRIATION CONTINGENCY:**

The vendor recognized that any agreement entered into shall commence upon the day first provided and continued in full force and effect until termination in accordance with its provisions. The vendor and the County herein recognized that the continuation of any contract after the close of any given fiscal year of the County which fiscal years end on June 30 of each year, shall be subject to the approval of the budget of the County providing for or covering such contract item as an expenditure therein. The County does not represent that said budget item will be actually adopted, said determination being the determination of the County Board of Supervisors at the time of the adoption of the budget.

**4.0 BID COMPLIANCE:**

All bids must comply with and not deviate from the provisions of the bid documents. Failure to meet a material requirement of the bid documents shall be reason for rejection of any bid.

**5.0 QUALITY:**

- a. The successful bidder must guarantee his product against any defect in workmanship or materials. Failure to comply with this requirement shall result in immediate return of the merchandise at the expense of the bidder for prompt replacement with merchandise meeting the standards listed herein. Should the bidder not meet this condition, the County shall obtain its requirements on the open market and the contractor shall be obligated to assume excess costs, if applicable.
- b. The materials and supplies called for herein shall be the best of their grade and types, prepared according to the best available standards or accepted formulas, and thoroughly tested and subjected to rigid examination and standardization. Items not meeting these requirements shall be replaced at no cost to the County upon due notice of deficiency.

**6.0 EXCEPTIONS TO SPECIFICATIONS:**

The fact that a manufacturer chooses not to produce equipment or material to meet these specifications will not be considered sufficient cause to adjudge these specifications as restrictive. Bidders shall offer the equipment or material which comes closest to meeting these specifications. Where deviations from the specifications contained herein are necessary, the bidder shall notate such deviations. Bidders shall state why, in their opinion, the equipment or materials they offer will render equivalent reliability, coverage and performance. Failure to detail all such deviations will comprise sufficient grounds for rejection of the entire proposal.

#### IV. SUPPORTIVE SPECIFICATIONS: (continued)

##### 7.0 INDEMNIFICATION:

To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the County, its agents representatives, officers, directors, officials and employees from and against all claims, damages, losses and expenses (including but not limited to attorney fees, court costs, and the cost of appellate proceedings), relating to, arising out of, or alleged to have resulted from the Contractor's acts, errors, mistakes or omissions relating to professional services in the performance of this Contract. Contractor's duty to defend, hold harmless and indemnify the County, its agents, representatives, officers, directors, officials and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property including loss of use resulting therefrom, caused by any acts, errors, mistakes or omissions related to professional services in the performance of this Contract including any person for whose acts, errors, mistakes or omissions the Contractor may be legally liable.

The amount and type of insurance coverage requirements set forth below will in no way be construed as limiting the scope of the indemnity in this paragraph.

**For all other hazards, liabilities and exposures:** To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the County, its agents, representatives, officers, directors, officials and employees from and against all claims, damages, losses and expenses (including but not limited to attorney fees, court costs, and the cost of appellate proceedings), relating to, arising out of or resulting from the Contractor's work or services. Contractor's duty to defend, hold harmless, and indemnify the County, its agents, representatives, officers, directors, officials and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, injury to, impairment or destruction of property including loss of use resulting therefrom, caused in whole or in part by any act or omission of the Contractor, anyone Contractor directly or indirectly employs or anyone for whose acts Contractor may be liable, regardless of whether it is caused in part by a party indemnified hereunder, including the County.

The amount and type of insurance coverage requirements set forth below will in no way be construed as limiting the scope of the indemnity in this paragraph.

##### 8.0 REQUIRED COVERAGE:

**General Clauses.** The Contractor, at its own expense, shall purchase and maintain the minimum insurance specified below with companies duly licensed, with a current A.M. Best, Inc. Rating of B++6, or approved unlicensed by the State of Arizona Department of Insurance.

**Additional Insured.** The insurance coverage, except Workers' Compensation and Professional Liability, required by this Contract, shall name the County, its agents, representatives, officers, directors, officials and employees as Additional Insureds.

**Coverage Term.** All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Contract is satisfactorily completed and formally accepted; failure to do so may, at the sole discretion of the County, constitute a material breach of this Contract.

**Primary Coverage.** The Contractor's insurance shall be primary insurance as respects the County, and any insurance or self insurance maintained by the County shall not contribute to it.

**Claim Reporting.** Any failure to comply with the claim reporting provisions of the policies or any breach of a policy warranty shall not affect coverage afforded under the policies to protect the County.

**Waiver.** The policies, except Workers' Compensation, shall contain a waiver of transfer rights of recovery (subrogation) against the County, its agents, representatives, directors, officers, and employees for any claims arising out of the Contractor's work or service.

#### IV. SUPPORTIVE SPECIFICATIONS: (continued)

##### 8.0 REQUIRED COVERAGE: (continued)

**Deductible/Retention.** The policies may provide coverage which contain deductibles or self insured retentions. Such deductible and/or self insured retentions shall not be applicable with respect to the coverage provided to the County under such policies. The Contractor shall be solely responsible for the deductible and/or self insured retention.

**Copies of Policies.** The County reserves the right to request and to receive, within 10 working days, certified copies of any or all of the above policies and/or endorsements. The County shall not be obligated, however, to review same or to advise Contractor of any deficiencies in such policies and endorsements, and such receipt shall not relieve Contractor from, or be deemed a waiver of the County's right to insist on, strict fulfillment of Contractor's obligations under this Contract.

**Commercial General Liability.** Contractor shall maintain Commercial General Liability insurance with a limit of not less than \$1,000,000 for each occurrence with a \$1,000,000 General Aggregate Limit. The policy shall include coverage for bodily injury, broad form property damage, personal injury, products and completed operations and blanket contractual covering, but not limited to, the liability assumed under the indemnification provisions of this Contract which Coverage will be at least as broad as Insurance Service Office, Inc. Policy Form CG 00011093 or any replacements thereof. The Commercial General Liability additional insured endorsement will be at least as broad as the Insurance Service Office, Inc. Additional Insured, Form B, CG 20101093, or replacements thereof.

Such policy shall contain a severability of interest provision, and shall not contain a sunset provision or commutation clause, nor any provision which would serve to limit third party action over claims.

**Automobile Liability.** Contractor shall maintain Commercial/Business Automobile Liability insurance with a combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence with respect to the Contractor's any owned, hired, and non-owned vehicles assigned to or used in performance of the Contractor's work or services. Coverage will be at least as broad as coverage code 1, "any auto", (Insurance Service Office, Inc. Policy Form CA 00011293, or any replacements thereof).

**Workers' Compensation.** The Contractor shall carry Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Contractor's employees engaged in the performance of the work or services; and Employer's Liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.

In case any work is subcontracted, the Contractor will require the Subcontractor to provide Worker's Compensation and Employer's Liability to at least the same extent as required of the Contractor.

**Professional Liability.** The Contractor retained by the County to provide the work or service required by this Contract will maintain Professional Liability insurance covering errors and omissions arising out of the work or services performed by the Contractor or any person employed by the Contractor, with a limit of not less than \$1,000,000 each claim.

##### 9.0 CERTIFICATES OF INSURANCE:

Prior to commencing work or services under this Contract, Contractor shall furnish the County with Certificates of Insurance, or formal endorsements as required by the contract, issued by Contractor's insurer(s), as evidence that policies providing the required coverages, conditions and limits required by this Contract are in full force and effect. Such certificates shall identify this Contract number or name.

In the event any insurance policy(ies) required by this contract is(are) written on a "claims made" basis, coverage shall extend for two years past completion and acceptance of the work or services and as evidenced by annual Certificates of Insurance. All Certificates of Insurance shall be identified with bid serial number and title. A

\$25.00 administrative fee will be assessed for all certificates received without the appropriate bid serial number and title.

**IV. SUPPORTIVE SPECIFICATIONS:** (continued)9.0 CERTIFICATES OF INSURANCE: (continued)9.1 Cancellation And Expiration Notice:

Insurance evidenced by this Certificate shall not expire, be canceled, or materially changed without fifteen (15) days prior written notice to the County. If a policy does expire during the life of the contract, a renewal Certificate must be sent to the County fifteen (15) days prior to the expiration date.

All Certificates of Insurance required by this Contract shall be identified with a bid serial number and title. A \$25.00 administrative fee shall be assessed for all Certificates received without the appropriate bid serial number and title.

10.0 CHANGES:

The County may require changes in the scope of the services to be performed by the Contractor hereunder. All such changes, which are mutually agreed upon by and between all the parties, shall be incorporated in written amendments to this Agreement. All such amendments shall state any increase or decrease in the amount of the compensation due to the Contractor for the change in scope.

11.0 SEVERABILITY:

Any provision of this contract which is determined to be invalid, void, or illegal shall in no way affect, impair, or invalidate any other provision hereof, and remaining provisions shall remain in full force and effect.

12.0 SAFETY STANDARDS:

All items supplied on this contract must comply with the current applicable Occupational Safety and Health Standards of the State of Arizona Industrial Commission, the National Electric code, and the National Fire Protection Association Standards.

13.0 INQUIRIES:

Questions concerning this bid should be directed to:

Dory Borlongan  
Department of Materials Management  
Telephone: (602) 506-3243

14.0 TECHNICAL INQUIRIES CONTACT:

Jim Decker  
AZTECH ITS Model Deployment Initiative  
Telephone: (602) 340-8250

15.0 TRW CONTACT:

Bill Daly  
Telephone: (404) 766-7699  
Fax: (404) 766-7595

DB/mab

cc: MCDOT



ORION SECURITY SPECIALISTS, INC., 4601 N. BLACK CANYON HWY., PHOENIX, AZ, 85015

V. PRICING:

The bidders hereby certify that they have read, understand, and agree that acceptance by Maricopa County of the bidder's offer by the issuance of a purchase order or contract will create a binding contract. Further, they agree to fully comply with all terms and conditions as set forth in the Maricopa County Procurement Code, and amendments thereto, together with the specifications and other documentary forms herewith made a part of this specific procurement.

Unit price as proposed for **MULTIPLE TRAFFIC VIDEO MONITORING SYSTEM** per Camera location indicated in Appendix A:

**B0605765**

1. City of Glendale		\$ 22,040.00
Cost per additional unit*	\$ <u>10,508.57</u>	
2. Town of Paradise Valley		\$ 43,961.00
Cost per additional unit*	\$ <u>10,508.57</u>	
3. City of Tempe		\$ 97,416.00
Cost per additional unit*	\$ <u>11,812.86</u>	
4. City of Mesa		\$ 60,843.00
Cost per additional unit*	\$ <u>10,508.57</u>	
Total		\$ <u>224,260.00</u>

\* (Complete remote camera system hardware, less mounting hardware and transmission media.)

Post warranty Maintenance  
(Labor & Maintenance 2nd thru 5th year)

<del>2nd year \$ 20,184.00</del>	<del>4th year \$24,910.00</del>
<del>3rd year \$ 22,500.00</del>	<del>5th year \$24,910.00</del>

Hourly Time & Materials rate for Maintenance/Repair **\$45.00/hr**

ORION SECURITY SPECIALISTS, INC., 4601 N. BLACK CANYON HWY., PHOENIX, AZ, 85015

Additional Pricing (Itemized components)  
(Please attach additional sheet if needed)

<u>SOUTHWEST MICROWAVE 902</u>	\$ <u>15,623.00</u>
<u>SOUTHWEST MICROWAVE 802</u>	\$ <u>9,435.00</u>
<u>ENERDYNE TI MODEMS (1 PAIR)</u>	\$ <u>29,755.00</u>
<u>IFS FIBER OPTIC MULTI MODE (1 PAIR)</u>	\$ <u>1,320.00</u>
<u>PELCO PARAPET MOUNT (CAMERA MOUNT)</u>	\$ <u>335.00</u>
<u>PELCO WALL MOUNT (CAMERA MOUNT)</u>	\$ <u>135.00</u>
<u>PELCO POLE MOUNT (CAMERA MOUNT)</u>	\$ <u>51.00</u>
<u>EQUIPMENT CABINET POLE MOUNT 303</u>	\$ <u>995.00</u>
<u>COLORADO OPTIC INTEGRATOR (NIGHT VIEW)</u>	\$ <u>4,984.00</u>
<u>COHU INTEGRATOR (AVAILABLE IN TIME)</u>	\$ <u>2,895.00</u>

**Catalog/Brand Name Discount Pricing:**

**Catalog Date:** Year 2000

**Percentage Discount:** \* % from \* (please specify)

**\*Orion's Cost + 10% on all Material.**

**Terms:** Net 30

**Federal ID No.:** 86-0675956

**Vendor Number:** 860675956

**Telephone/Fax No.:** (602) 242- 1555/(602) 433- 7933

**Contract Period:** To Cover the Period Ending ~~February 28, 2000~~  
February 28, 2001  
February 28, 2002 2003.